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(71) Applicant (for all designated States except US): JALUNA  
SA [FR/FR]; 6, avenue Gustave Eiffel, F-78180 Mon-  
tigny-le Bretonneux (FR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): BOULE, Ivan

[FR/FR]; 17, Boulevard Richard Lenoir, F-75011 Paris  
(FR). LEBEE, Pierre [FR/FR]; 18 rue des Genêts,  
F-60800 Crépy en Valois (FR).

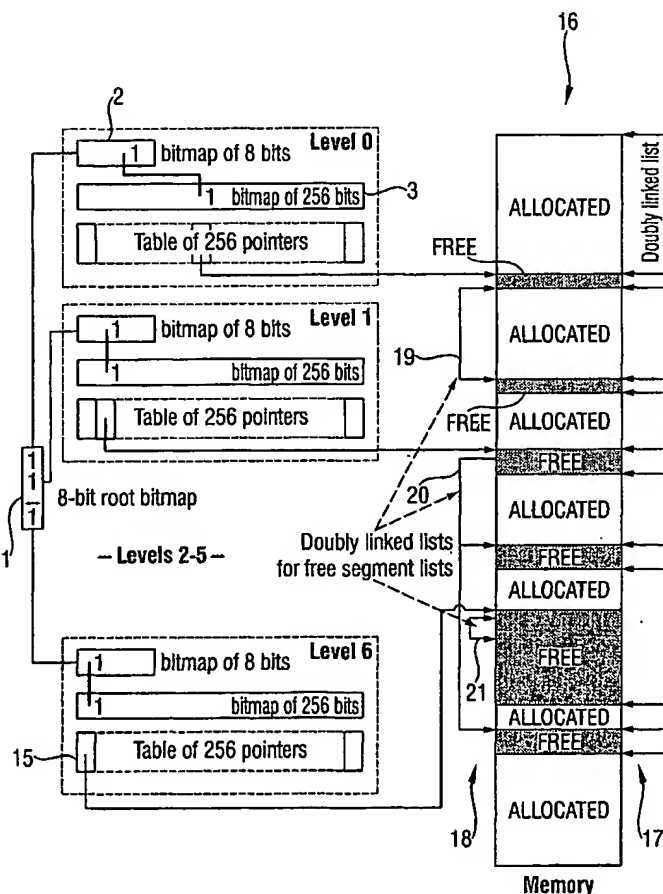
(74) Agent: RUMMLER, Felix; R.G.C. Jenkins & Co., 26  
Caxton Street, London SW1H 0RJ (GB).

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(54) Title: MEMORY ALLOCATION



(57) Abstract: There is provided a method of managing a data memory in order to improve the processing of memory allocation requests. Memory segments are associated with different levels according to their size. A different granule size to the power of two is defined for each level. The granule size defines the range of segment sizes associated with each level. A multiple-stage bitmap is provided which indicates which of the levels contains free segments and the size of free segments. The bitmap is updated each time a memory segment is freed or allocated. Thereby, a deterministic "Best Fit" approach is provided which permits the allocation and release of memory segments at both task and interrupt level and which reduces memory fragmentation.



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